Innovation still lags after economic crisis

But China and South Korea are booming, reports Organisation for Economic Co-operation and Development.

Barbara Casassus

13 September 2012

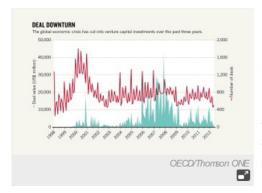
Industrialized countries have pinned their hopes on research and development (R&D) to spur recovery from the financial and economic crisis. But these hopes remain mostly unfulfilled, according to the Organisation for Economic Co-operation and Development's report *OECD Science, Technology and Industry Outlook 2012*¹, released today.

Innovation declined across all sectors worldwide in 2009, in response to the most serious economic turmoil for half a century. Average business spending on R&D in the OECD's 30 member countries dropped by a record 4.5% that year. It has picked up again in most places, but spending has not returned to pre-crisis levels everywhere, says Dominique Guellec, head of the countries studies and outlook division of the OECD's science, technology and industry directorate in Paris.

Member-state governments made innovation a pillar of the recovery, boosting their collective R&D spending by 9% in 2009. This partly offset the drop in business outlays, but budgets soon came under pressure. In 2010, member countries — by then numbering 34 — cut back public R&D allocations by a total of 4%.

National differences

In eastern and southern European countries such as Greece, where unemployment was already high and R&D spending low, the economic crisis has made things worse. By contrast, China, South Korea and other emerging Asian economies are out-innovating the Western world. Markers such as the number of patent filings have increased in these countries since 2007, and "are likely to continue to do so in the future", the report predicts. China's share of global R&D spending jumped from 7% in 2004 to 13% in 2009, and innovation has also risen up policy agendas in India and Brazil.



Economic difficulties can sometimes awaken a country's entrepreneurial spirit, but that hasn't generally been the case over the past four years: the creation of new companies remains considerably lower overall than in 2007, as do venture-capital investments (see 'Deal downturn'). "This is particularly worrying," says Guellec. "Since the economic outlook is still extremely risky, venture capitalists are just not coming forward."

The crisis has triggered changes in innovation policy among OECD governments, although they have been progressive rather than radical, the report says. Measures intended specifically to boost R&D — such as tax incentives, improved patent and intellectual-property rules and new infrastructure for information and communication technology — are in wider use now than before the crisis.

But the report criticizes governments for not going far enough to support entrepreneurship. "Unless both the public and private sectors turn more attention to innovation and R&D, they are unlikely to meet their objectives in restoring economic growth and employment to acceptable levels," warns Guellec.

Nature | doi:10.1038/nature.2012.11414

		-	F				_
-	ĸ	eı	гe	re	n	ce	S

1. OECD Science, Technology and Industry Outlook 2012 http://dx.doi.org/10.1787/sti_outlook-2012-en (OECD Publishing, 2012).

SPRINGER NATURE